

Title (en)

Efficient packet handling for timerbased packet discard in a wireless communication system

Title (de)

Effiziente Pakethandhabung für Verwerfen von Paketen auf Timerbasis in einem drahtlosen Kommunikationssystem

Title (fr)

Gestion efficace de paquet pour un rejet de paquets selon un minuteur dans un système de communication sans fil

Publication

**EP 2528287 B1 20141224 (EN)**

Application

**EP 12175768 A 20090807**

Priority

- EP 09791285 A 20090807
- US 53658709 A 20090806
- US 8707408 P 20080807

Abstract (en)

[origin: US2010034187A1] Systems and methodologies are described herein that facilitate efficient handling of packets (e.g., Packet Data Convergence Protocol (PDCP) Protocol Data Units (PDUs) or Service Data Units (SDUs)) in a wireless communication system. As described herein, a number of consecutive packets that are discarded due to a discard timer expiration event and/or other causes can be monitored and compared to a number of tolerated consecutive discarded packets. If the number of consecutive discarded packets does not exceed the number of tolerated consecutive packets, conventional processing operations such as header modification and compression, ciphering, or the like can be omitted for respective packets subsequent to a discarded packet, thereby significantly reducing processing overhead. As further described herein, the number of tolerated consecutive discarded packets can be chosen to maintain header compression (e.g., Robust Header Compression (RoHC)) synchronization, ciphering synchronization, and/or other suitable properties.

IPC 8 full level

**H04L 47/32** (2022.01)

CPC (source: EP KR US)

**H04L 47/2416** (2013.01 - EP US); **H04L 47/28** (2013.01 - EP KR US); **H04L 47/32** (2013.01 - EP KR US); **H04L 47/38** (2013.01 - EP US); **H04L 49/90** (2013.01 - US); **H04L 69/04** (2013.01 - EP US); **H04W 8/04** (2013.01 - US); **H04W 28/0284** (2013.01 - EP); **H04W 28/06** (2013.01 - EP KR US); **H04L 1/0018** (2013.01 - EP US); **H04W 80/02** (2013.01 - EP US)

Cited by

CN107147594A; GB2524349A; GB2524349B; US10778257B2; US11323136B2; US11750227B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**US 2010034187 A1 20100211**; **US 8325608 B2 20121204**; CA 2731099 A1 20100211; CA 2731099 C 20151222; CN 102113277 A 20110629; CN 102113277 B 20140312; CN 103826260 A 20140528; CN 103826260 B 20170905; EP 2329624 A1 20110608; EP 2329624 B1 20121114; EP 2528287 A1 20121128; EP 2528287 B1 20141224; ES 2397595 T3 20130308; ES 2532841 T3 20150401; JP 2011530891 A 20111222; JP 2013232937 A 20131114; JP 5301667 B2 20130925; JP 5612169 B2 20141022; KR 101207541 B1 20121204; KR 20110051236 A 20110517; RU 2011108459 A 20120920; RU 2477006 C2 20130227; TW 201010344 A 20100301; TW I441485 B 20140611; WO 2010017467 A1 20100211

DOCDB simple family (application)

**US 53658709 A 20090806**; CA 2731099 A 20090807; CN 200980130157 A 20090807; CN 201410050939 A 20090807; EP 09791285 A 20090807; EP 12175768 A 20090807; ES 09791285 T 20090807; ES 12175768 T 20090807; JP 2011522272 A 20090807; JP 2013128911 A 20130619; KR 20117005380 A 20090807; RU 2011108459 A 20090807; TW 98126767 A 20090810; TW 98126767 D 20090810; US 2009053134 W 20090807